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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/742,723	12/21/2000	Mark Suska	33214	7757

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EXAMINER

HERNANDEZ, NELSON D

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 02/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/742,723	SUSKA, MARK	
	Examiner	Art Unit	
	Nelson D. Hernandez	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 18-22 and 24-30 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-14 is/are allowed.
- 6) ☒ Claim(s) 15 and 23 is/are rejected.
- 7) ☒ Claim(s) 16 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/18/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

- 1.
2. Claims ~~6-14~~, 18-22 and 24-30 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on November 3, 2004.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee, US Patent 6,721,008 B2 in view of Li, US Patent 6,833,862 B1.

Regarding **claim 15**, Lee discloses an integrated semiconductor imaging circuit (Fig. 3) (Fig. 3) for use with an electronic processing system comprising: an imaging array sensor (Fig. 3: 12) having an array of sensing pixels and an array address generator (Fig. 3: 16) integrated on a die (Fig. 3: 10); and an interface (Fig. 3: 89) integrated on the die for receiving data from the imaging array sensor as determined by the imaging array sensor and adapted to transfer the data to the electronic processing system (Fig. 3: 80) as determined by the electronic processing system (Col. 4, line 66 – col. 5, line 57). The interface transferring the data to the electronic processing system

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in inherently taught by Lee since the processing system (Fig. 3: 80) works at a predetermined rate. Lee does not explicitly disclose the electronic processing system having a data bus.

However, Li teaches an imaging circuit (Fig. 2) comprising a sensor array (Fig. 2: 12), a bus interface (Fig. 2: 54) with a data bus (Fig. 2: 20) for transmitting data to a processing system (Fig. 2: 18) (Col. 2, lines 32-64; col. 3, lines 13-21).

Therefore, taking the combined teaching of Lee in view of Li as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the electronic processing system in Lee with a data bus (USB) with the motivation of transferring the data from the imaging circuit to the electronic processing system as suggested by Li (Col. 2, lines 32-64).

5. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Li, US Patent 6,833,862 B1 in view of Chow, US Patent 6,021,449.

Regarding **claim 23**, Li discloses an integrated semiconductor imaging circuit (Fig. 2) for use with an electronic processing system having a data bus (Fig. 2: 20) comprising: an imaging array (Fig. 2: 12), of sensing pixels; a buffer (Fig. 2: 56) for storing data received at an input port and for outputting data through an output port to the data bus; a unit (Fig. 2: 50) for transferring data from a selected pixel to the buffer input port; a circuit (Fig. 2: 58) adapted to respond to the electronic processing system for controlling the transfer of the stored data through the buffer output port. Li fails does not explicitly disclose a counter for determining the quantity of data in the buffer, a

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signal generator for alerting the electronic processing system when the quantity of data in the buffer attains a predetermined level.

However, Chow teaches an electronic circuit (Fig. 4) for a camera that includes a counter (Fig. 4: 40) for counting the amount of data in the buffer means (Fig. 4: 32), also teaches a signal generator (Fig. 4: 42) for alerting that the buffer reached or exceeds a predetermined value (Co. 1, lines 58-65; col. 3, line 63 – col. 4, line 44).

Therefore, taking the combined teaching of Li in view of Chow as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Li by having a counter for counting the amount of data in the buffer means and a signal generator for alerting that the buffer reached or exceeds a predetermined value. The motivation to do so would help the buffer in the camera to overflow due to a high rate of video signals being stored in the buffer as suggested by Chow (Col. 2, lines 47-55).

Allowable Subject Matter

6. Claim 1 is generic and allowable. Accordingly, the restriction requirement as to the encompassed species is hereby withdrawn and claims 6-14, directed to the species of Fig. 2 no longer withdrawn from consideration since all of the claims to this species depend from or otherwise include each of the limitations of an allowed generic claim. However, claims 18-22 and 24-30, directed to the species of Figs. 6 and 7 remain withdrawn from consideration since they do not all depend upon or otherwise include all the limitations of an allowed generic claim as required by 37 CFR 1.141.

In view of the above noted withdrawal of the restriction requirement as to the linked species, applicant(s) are advised that if any claim(s) depending from or including all the limitations of the allowable generic linking claim(s) be presented in a continuation or divisional application, such claims may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

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7. Claims 1-14 are allowed.

8. The following is a statement of reasons for the indication of allowable subject matter:

Regarding **claim 1**, the primary reason for indication of allowable subject matter is that the prior art or a combination of prior art fails to teach or reasonably suggest a memory for storing imaging array data and clocking signals at a rate determined by the clocking signals.

Lee discloses an integrated semiconductor imaging circuit (Fig. 3) (Fig. 3) for use with an electronic processing system comprising: an imaging array sensor (Fig. 3: 12) having an array of sensing pixels and an array address generator (Fig. 3: 16) integrated on a die (Fig. 3: 10); a circuit for controlling the transfer of the data from the memory at a rate determined by the processor system, and an interface (Fig. 3: 89) integrated on the die for receiving data from the imaging array sensor as determined by the imaging array sensor and adapted to transfer the data to the electronic processing system (Fig. 3: 80) as determined by the electronic processing system (Col. 4, line 66 – col. 5, line 57). The interface transferring the data to the electronic processing system is inherently taught by Lee since the processing system (Fig. 3: 80) works at a predetermined rate. However, Lee fails to teach or reasonably suggest a memory for storing imaging array data and clocking signals at a rate determined by the clocking signals.

9. Claims **16** and **17** objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Regarding **claim 16**, the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest a memory means for storing imaging array data and address signals at a rate determined by the image array sensor.

Contact


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson D. Hernandez whose telephone number is (703) 305-8717. The examiner can normally be reached on 8:30 A.M. to 6:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R. Garber can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nelson D. Hernandez
Examiner
Art Unit 2612

NDHH
February 18, 2005


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SUPERVISORY PATENT EXAMINER
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